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HEWLETT-PACKARD COMPANY Intellectual Property Administration P.O. Box 272400 Fort Collins, Colorado 80527-2400

PATENT APPLICATION

Inventor(s):

Leith Johnson Application No.: 10/017,371

Confirmation No.: 8105 Examiner: Sheng Jen Tsal

Filing Date:

December 7, 2001

Group Art Unit: 2186

Title: Virtualized Resources in a Partitionable Server

Mail Stop After Final **Commissioner For Patents** PO Box 1450 Alex

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	TRANSMITTAL LETTER FOR RESPONSE/AMENDMENT											
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	No additional fee Other Response to Notice of Non-Compliant Appeal Brief					Fee\$						
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Charge \$ 0 to Deposit Account 08-2025. At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally charge any fees to Deposit Account 08-2025 under 37 CFR 1.16 through 1.21 Inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees. A duplicate copy of this sheet is enclosed.												
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	Typed Name: Robin A. Matachun Signature:					Robert Plotkin, Esq. Attomey/Agent for Applicant(s)						
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Date:

October 4, 2006

Telephone: 978-318-9914

Rev 10/05 (TransAmdFax)

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PATENT APPLICATION

HEWLETT-PACKARD COMPANY Intellectual Property Administration 10016615-1 ATTORNEY DOCKET NO. P.O. Box 272400 Fort Collins, Colorado 80527-2400 Confirmation No.: 8105 Inventor(s): **Leith Johnson** Examiner: Shang Jen Teal Application No.: 10/017,371 Group Art Unit: 2188 December 7, 2001 Filing Date: Title: Virtualized Resources in a Partitionable Server Mail Stop After Final Commissioner For Patents PO Box 1450 Alexandria, VA 22313-1450 TRANSMITTAL LETTER FOR RESPONSE/AMENDMENT Transmitted herewith is/are the following in the above-identified application: Petition to extend time to respond Response/Amendment Supplemental Declaration New fee as calculated below No additional fee Fee\$ Other Response to Notice of Non-Compliant Appeal Brief CLAIMS AS AMENDED BY OTHER THAN A SMALL ENTITY (6) RATE (4) (5) PRESENT (3) ADDIŤIÓNAL (1) FOR HIGHEST NUMBER CLAIMS REMAINING NUMBER **FEES** PREVIOUSLY PAID FOR **EXTRA** AFTER AMENDMENT **EXTRA** TOTAL \$50 0 \$ MINUS X 0 **CLAIMS** \$200 \$ 0 X INDEP. MINUS 0 CLAIMS FIRST PRESENTATION OF A MULTIPLE DEPENDENT CLAIM + \$360 S 0 4th Month 3rdMonth 2nd Month \$ 0 EXTENSION 1st Month \$1590 \$1020 \$450 \$120 \$ OTHER FEES TOTAL ADDITIONAL FEE FOR THIS AMENDMENT

Charge \$ 0 to Deposit Account 08-2025. At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally charge any fees to Deposit Account 08-2025 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees. A duplicate copy of this sheet is enclosed.

I hereby certify that this paper is being transmitted to the Patent and Trademark Office facsimile number (571) 273-8300. Date of facsimile: October 4, 2006

Typed Name: Signature:

Respectfully submitted,

Leith Johnson

Robert Plotkin, Esq.

Attorney/Agent for Applicant(s)

43,861 Reg No.:

October 4, 2006 Date:

Telephone: 978-318-9914

Rev 10/05 (TransAmdFext)

OCT 0 4 2006

ATTORNEY'S DOCKET NO: 10016615-1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Leith Johnson

Serial No:

10/017,371

Filed:

December 7, 2001

For:

Virtualized Resources in a Partitionable Server

Examiner:

Sheng Jen Tsai

Art Unit:

2186

CERTIFICATE OF TRANSMISSION BY FACSIMILE

The undersigned hereby certifies that the correspondence listed above is being transmitted to the Commissioner for Patents by facsimile via facsimile number 571-273-8300 on October 4, 2006

Robin A. Matachun

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450

Alexandria, VA 22313-1450

APPELLANTS' BRIEF ON APPEAL

This Brief is filed in response to a Notice of Non-Compliant Appeal Brief mailed on September 15, 2006.

This is an appeal pursuant to 35 U.S.C. § 134 from the Examiner's decision rejecting claims 1-5, 8-11, 14-21, 23, 25, and 27-31 as set forth in the Final Office Action of March 13, 2006, and as maintained in the Advisory Action of June 6, 2006.

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REAL PARTY IN INTEREST

The real party in interest is Hewlett-Packard Development Company, L.P., a Texas Limited Partnership having its principal place of business in Houston, Texas.

RELATED APPEALS AND INTERFERENCES

Applicant's attorney knows of no related pending appeals or interferences.

STATUS OF CLAIMS

Claims 1-5, 8-11, 14-21, 23, 25, and 27-31 are now pending in this application. Claims 6-7, 12-13, 22, 24, and 26 are canceled.

Claims 1-5, 8-11, 14-21, 23, 25, and 27-31 stand rejected and are the subject of this appeal. More specifically, claims 1-5, 8-11, 14-21, 23, 25, and 27-31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Gulick et al. (U.S. Pat. No. 6,314,501) in view of Vishin et al. (U.S. Pat. No. 5,860,146).

STATUS OF AMENDMENTS

Remarks, but no amendments, were submitted in an after-final response on May 15, 2006.

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SUMMARY OF CLAIMED SUBJECT MATTER

Claims 1-5, 8-11, and 27-28 all include substantially the same relevant limitations related to creating a physical resource identifier space in a partition of a partitionable computer system. In particular, all of these claims include limitations requiring a mapping that defines a non-monotonic function. The relevance of this limitation will be explained in more detail below.

Table 1 shows the preamble and elements of independent claim 1, and examples of where support for the text of claim 1 may be found in the specification.

Claim Text	Support in Specification		
Claim Text Claim 1. In a partitionable computer system including a plurality of machine resources having a plurality of machine resource identifiers,	P. 12, lines 18-31; FIGS. 3A-3B (showing examples of machine resources); p. 13, line 20 - p. 15, line 23); FIG. 2C (machine memory blocks 210a-e); p. 16, lines 15-31 (machine addresses 216 are examples of "machine resource		
	FIGS. 6A-6B (machine resource identifiers 616a-g); p. 36, line 9 - p. 37, line 3.		

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a method for creating a physical	FIG. 4; p. 22, line 20 - p. 25,
resource identifier space in a	line 3.
partition of the partitionable	
computer system, the method	
comprising steps of:	
establishing a mapping between a plurality of physical resource identifiers and at least some of the plurality of machine resource	FIG. 4, steps 406-416; p. 23, line 6 - p. 24, line 8 (the physical-to-machine address translation table is an example
identifiers,	of a mapping between a plurality
identifiers,	of physical resource identifiers and at least some of the plurality of machine resource identifiers).
wherein the plurality of physical resource identifiers are numbered sequentially beginning with zero,	P. 12, lines 9-10; FIGS. 2A-2B (physical address spaces 202a-b); p. 15, lines 30-32; and
	p. 17, lines 7-11, 22-28.
and wherein the mapping defines a non-monotonic function; and	FIGS. 2A-2C (e.g., mapping between physical addresses 218a and the corresponding portion of machine addresses 216).
(B) providing, to an operating	FIGS. 2A-2B (the virtual-to-
system executing in the	physical translation mechanisms
partition, an interface for the	204a-b are examples of interfaces
operating system to access the at	to operating systems); p. 15,
least some of the plurality of	line 33 - p. 16, line 14.
machine resources using the	
plurality of physical resource	

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identifiers.

Table 1: Claim 1

Independent claim 8 contains substantially similar limitations, which find support in at least the same places in the specification.

Claims 14-21 and 29 all include substantially the same relevant limitations related to accessing a physical machine resource in a partitionable computer system. In particular, all of these claims include limitations requiring a mapping that defines a non-monotonic function. Table 2 shows the preamble and elements of independent claim 14, and examples of where support for the text of claim 14 may be found in the specification.

Claim Text	Support in Specification			
Claim 14. In a partitionable	P. 12, lines 18-31;			
computer system including a	FIGS. 3A-3B (showing examples of			
plurality of machine resources	machine resources); p. 13, line			
having a plurality of machine	20 - p. 15, line 23);			
resource identifiers,	FIG. 2C (machine memory blocks			
	210a-e); p. 16, lines 15-31			
-	(machine addresses 216 are			
	examples of "machine resource			
	identifiers"); and			
	FIGS. 6A-6B (machine resource			
	identifiers 616a-g); p. 36, line			
	9 - p. 37, line 3.			
a method for accessing a select	FIG. 5; p. 25, line 3 - p. 26,			

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one of the plurality of machine	line 9.
resources specified by a physical	
resource identifier provided by	
an operating system executing in	
a partition in the partitionable	
computer system, the method	
comprising steps of:	
(A) identifying a mapping	FIG. 5, element 504; p. 25, lines
associated with the partition,	27-29; and
wherein the mapping maps a	FIGS. 2A-2C (e.g., mapping
plurality of physical resource	between physical addresses 218a
identifiers in a sequential zero-	and the corresponding portion of
based physical resource	machine addresses 216).
identifier space of the partition	
to at least some of the plurality	
of machine resource identifiers,	
and wherein the mapping defines a	<u> </u>
non-monotonic function;	
(B) translating the physical	FIG. 5, element 506; p. 25, lines
resource identifier into a	29-32.
machine resource identifier using	
the mapping, wherein the machine	
resource identifier specifies the	
select one of the plurality of	
machine resources; and	
	FIG. 5, element 508; p. 25, line
(C) causing the select one of the	
plurality of machine resources to	32 - p. 26, line 2.
be accessed using the machine	
resource identifier.	

Table 2: Claim 14

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Independent claim 18 contains substantially similar limitations, which find support in at least the same places in the specification.

Claims 23, 25, and 30-31 all include substantially the same relevant limitations related to remapping memory locations, starting from a mapping which defines a non-monotonic function. Table 3 shows the preamble and elements of independent claim 23, and examples of where support for the text of claim 23 may be found in the specification.

Claim Text	Support in Specification
Claim 23. In a partitionable	P. 12, lines 18-31;
computer system including a	FIGS. 3A-3B; p. 13, line 20 - p.
plurality of machine memory	15, line 23); and
locations having a plurality of	FIG. 2C (machine memory blocks
machine addresses,	210a-e); p. 16, lines 15-31.
the partitionable computer system	FIG. 4, steps 406-416; p. 23,
further including a plurality of	line 6 - p. 24, line 8 (the
physical memory locations having	physical-to-machine address
a plurality of physical memory	translation table is an example
addresses that are mapped to at	of a mapping between a plurality
least some of the plurality of	of physical memory locations and
machine memory addresses,	at least some of the plurality of
	machine memory addresses).
the mapping defining a non-	FIGS. 2A-2C (e.g., mapping
monotonic function,	between physical addresses 218a
·	and the corresponding portion of

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	machine addresses 216).
	FIG. 3B (partitions 322a-b
the partitionable computer system	1
further including a plurality of	execute software programs 330a-
partitions executing a plurality	d); p. 14, line 26 - p. 15, line
of software programs, a method	23.
comprising steps of:	
(A) selecting a first subset of	FIG. 7, element 702 (physical
the plurality of physical memory	memory block P is a first subset
locations, the first subset of	of the plurality of physical
the plurality of memory locations	memory locations); p. 33, lines
being mapped to a first subset of	13-28.
the plurality of machine memory	
addresses; and	
(B) remapping the first subset of	FIG. 7, elements 704-712; p. 33,
the plurality of memory locations	line 29 - p. 35, line 17.
to a second subset of the	
plurality of machine memory	
addresses without rebooting the	
partitionable computer system.	

Table 3: Claim 23

Independent claim 25 contains substantially similar limitations, which find support in at least the same places in the specification.

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The single ground of rejection for review is the rejection of claims 1-5, 8-11, 14-21, 23, 25, and 27-31 under 35 U.S.C. § 103(a)

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as being unpatentable over Gulick et al. (U.S. Pat. No. 6,314,501) in view of Vishin et al. (U.S. Pat. No. 5,860,146).

ARGUMENT

The Combination of Gulick and Vishin does not Disclose the Non-Monotonic Function Required by

Claims 1-5, 8-11, 14-21, 23, 25, and 27-31

Claims 1-5, 8-11, 14-21, 23, 25, and 27-31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Gulick et al. (U.S. Pat. No. 6,314,501) in view of Vishin et al. (U.S. Pat. No. 5,860,146). In particular, the Final Office Action asserts that Gulick discloses the limitation, "wherein the mapping defines a non-monotonic function." Applicant respectfully disagrees that Gulick teaches or suggests this limitation, and requests that the rejection be reversed.

The distinction between the claims on appeal and the teachings of Gulick may be made clear by reference to the meaning of "non-monotonic." Merriam Webster's Collegiate Dictionary, 10th Ed., for example, defines "monotonic" as "having the property either of never increasing or of never decreasing as the values of the independent variable or the subscripts of the terms increase." According to this definition, the sequence 1, 2, 5, 10, 10, 10, 16 is monotonic because the values never decrease from one term to the next. Note

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that this sequence is monotonic even though all of the values in the sub-sequence 10, 10, 10 are the same. Note further that this sequence is monotonic even though the values of the terms do not increase by equal amounts. This definition of monotonic merely requires that the sequence either never increase or never decrease. In this example, the values of the sequence never decrease and therefore satisfy this definition of "monotonic."

A "non-monotonic" function, therefore, is one which both increases and decreases. For example, the sequence 1, 2, 5, 10, 10, 10, 6 is an example of a non-monotonic function because it both increases (e.g., from 1 to 2) and decreases (e.g., from 10 to 6) from one term to the next.

An example of a non-monotonic mapping function may be found in FIGS. 2A-2C of the present application and the accompanying description. Consider, for example, physical memory blocks 212a, 212e, and 212d, as shown in FIG. 2A. The memory locations in these three memory blocks 212a, 212e, and 212d are sequentially numbered within the physical addresses 218a of the physical address space 202a. Referring to FIG. 2C, however, it may be seen that in the machine address space 202, the machine addresses of physical memory block 212e are higher than those of physical memory block 212a, while the machine addresses of physical memory block 212d are lower than those of physical memory block 212d are lower.

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between the physical addresses 218a (FIG. 2A) - containing physical memory blocks 212a, 212e, and 212d - and the corresponding portion of the machine addresses 216 (FIG. 2C) is non-monotonic, because as the physical addresses 218a increase, the corresponding ones of the machine addresses 216 first increase, and then decrease.

Neither Gulick nor Vishin, nor the combination thereof, teaches or suggests this express limitation of claim 1, as currently presented. Gulick, for example, teaches a mapping that is monotonic. Referring to FIG. 3 of Gulick, for example, the mapping between the address space labeled "OS#1" and the corresponding addresses in MSU memory space 350 is monotonic. As the addresses in address space OS#1 increase, the corresponding addresses in the MSU memory space 350 always increase. Neither Gulick nor Vishin teaches or suggests otherwise.

The Final Office Action incorrectly states that FIG. 33 of Gulick "is a block diagram of apparatus for carrying out the address relocation and reclamation methods of the present invention which leads to a non-monotonic mapping function from physical to machine resources." Gulick uses the term "relocation" merely to refer to the process of mapping addresses in one address space to addresses in another address space. The only examples that Gulick provides of such relocation (mapping) involve monotonic mappings. The Office

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Action points to no suggestion in Gulick to create a non-monotonic mapping, and Gulick does not in fact make any such suggestion.

More specifically, FIG. 33 of Gulick illustrates an apparatus for performing the "relocation" and "reclamation" functions described elsewhere by Gulick. As indicated at col. 15, line 66 col. 16, line 4, Gulick uses the terms "relocated" and "mapped" as synonyms. Gulick defines "relocation" as the "assignment of a base address to an exclusive memory window" (col. 16, lines 19-20). As shown in FIG. 4, operating system window 430 is "relocated" to base address zero, since operating system window 430 is mapped to a portion of the main memory 160 (shown on the right side of FIG. 4) beginning at address zero (col. 16, lines 23-26). Similarly, operating system window 410 is "relocated" to base address 2GB, since operating system window 410 is mapped to a portion of the main memory 160 beginning at address 2GB. The example "relocation" (mapping) shown in FIG. 4 is a monotonic mapping.

FIGS. 3 and 5 of Gulick show further examples of the monotonic mappings disclosed by Gulick. More specifically, and as described in more detail in the Response filed by Applicant on February 10, 2006, FIGS. 3 and 5 of Gulick show monotonic mappings between the address spaces labeled "OS#1" and the corresponding addresses in MSU memory spaces 350 and 504, respectively. In summary, the only

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mappings disclosed by Gulick are monotonic mappings, and Gulick does not suggest using mappings that are non-monotonic.

Gulick also discloses "reclamation," defined as "the re-mapping of the address space within a window in order to reclaim the memory locations that fall behind a memory-mapped I/O address space" (col. 16, lines 30-32). The Advisory Action incorrectly states that Gulick discloses using such reclamation to product non-monotonic mappings. Gulick does not, in fact, teach or suggest performing such reclamation to produce non-monotonic mappings between physical addresses and machine addresses. For example, as described at col. 16, lines 30-59 of Gulick, reclamation is used to reclaim the low memory holes 542 and 572. As shown in FIGS. 3 and 5, however, such reclamation does not produce non-monotonic mappings. Rather, as described above, the mappings between physical and machine addresses shown in FIGS. 3 and 5 are purely monotonic.

The Examiner relies solely on Gulick with respect to the "non-monotonic" claim limitations. The Examiner does not point to any teaching or suggestion in Vishin for the use of non-monotonic mappings.

All of the rejected claims include (either directly or indirectly) the limitation "wherein the mapping defines a non-monotonic function," or a substantially similar limitation. Neither Gulick, nor Vishin, either individually or in combination, teach or

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suggest this limitation. The pending claims, therefore, patentably distinguish over the combination of Gulick and Vishin. Applicant therefore traverses the rejection and respectfully requests that it be withdrawn.

CONCLUSIONS

The Examiner's rejections of claims 1-5, 8-11, 14-21, 23, 25, and 27-31 should be reversed for the reasons stated above.

If this Brief is not considered timely filed and if a request for extension of time is otherwise absent, applicant hereby requests any extension of time. Please charge any fees or make any credits, to Deposit Account No. 08-2025.

Respectfully submitted,

Robert Plotkin, Esq.

Date

October 3, 2006

Req. No. 43,861

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APPENDIX A: CLAIMS ON APPEAL

Claim 1. In a partitionable computer system including a plurality of machine resources having a plurality of machine resource identifiers, a method for creating a physical resource identifier space in a partition of the partitionable computer system, the method comprising steps of:

- establishing a mapping between a plurality of physical (A) resource identifiers and at least some of the plurality of machine resource identifiers, wherein the plurality of physical resource identifiers are numbered sequentially beginning with zero, and wherein the mapping defines a non-monotonic function; and
- providing, to an operating system executing in the (B) partition, an interface for the operating system to access the at least some of the plurality of machine resources using the plurality of physical resource identifiers.

Claim 2. The method of claim 1, wherein the plurality of machine resources comprises a plurality of machine memory locations, wherein the plurality of machine resource identifiers comprises a plurality of machine memory addresses, and wherein the plurality of physical resource identifiers comprises a plurality of physical memory addresses.

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Claim 3. The method of claim 1, further comprising a step of performing the steps (A) and (B) for each of a plurality of partitions of the partitionable computer.

Claim 4. The method of claim 1, wherein the step (A) comprises a step of creating an address translation table that records the mapping between the plurality of physical resource identifiers and the at least some of the plurality of machine resource identifiers.

Claim 5. The method of claim 1, wherein the interface comprises means for translating a physical resource identifier selected from among the plurality of physical resource identifiers into one of the plurality of machine resource identifiers in accordance with the mapping.

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Claim 8. In a partitionable computer system including a plurality of machine resources having a plurality of machine resource identifiers, an apparatus comprising:

mapping means for establishing a mapping between a plurality of physical resource identifiers and at least some of the plurality of machine resource identifiers, wherein the plurality of physical resource identifiers are numbered sequentially beginning with zero, and wherein the mapping defines a non-monotonic function; and

interface means for accessing the at least some of the plurality of machine resources in response to requests from an operating system executing in a partition of the partitionable computer system, wherein the requests identify the at least some of the plurality of machine resources using the plurality of physical resource identifiers.

Claim 9. The apparatus of claim 8, wherein the plurality of machine resources comprises a plurality of machine memory locations, wherein the plurality of machine resource identifiers comprises a plurality of machine memory addresses, and wherein the plurality of physical resource identifiers comprises a plurality of physical memory addresses.

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Claim 10. The apparatus of claim 8, wherein the mapping means comprises means for creating an address translation table that records the mapping between the plurality of physical resource identifiers and the at least some of the plurality of machine resource identifiers.

Claim 11. The apparatus of claim 8, wherein the interface means comprises means for translating a physical resource identifier selected from among the plurality of physical resource identifiers into one of the plurality of machine resource identifiers in accordance with the mapping.

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Claim 14. In a partitionable computer system including a plurality of machine resources having a plurality of machine resource identifiers, a method for accessing a select one of the plurality of machine resources specified by a physical resource identifier provided by an operating system executing in a partition in the partitionable computer system, the method comprising steps of:

- (A) identifying a mapping associated with the partition, wherein the mapping maps a plurality of physical resource identifiers in a sequential zero-based physical resource identifier space of the partition to at least some of the plurality of machine resource identifiers, and wherein the mapping defines a non-monotonic function;
- (B) translating the physical resource identifier into a machine resource identifier using the mapping, wherein the machine resource identifier specifies the select one of the plurality of machine resources; and
- (C) causing the select one of the plurality of machine resources to be accessed using the machine resource identifier.

Claim 15. The method of claim 14, wherein the plurality of machine resources comprises a plurality of machine memory locations, wherein the plurality of machine resource identifiers comprises a plurality of machine memory addresses, and wherein the plurality of physical resource identifiers comprises a plurality of physical memory addresses.

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Claim 16. The method of claim 14, wherein the step (C) comprises a step of reading a datum from the machine memory address.

Claim 17. The method of claim 14, wherein the step (C) comprises a step of writing a datum to the machine memory address.

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Claim 18. In a partitionable computer system including a plurality of machine resources having a plurality of machine resource identifiers, an apparatus for accessing a select one of the plurality of machine resources specified by a physical resource identifier provided by an operating system executing in a partition in the partitionable computer system, the apparatus comprising:

means for identifying a mapping associated with the partition, wherein the mapping maps a plurality of physical resource identifiers in a sequential zero-based physical resource identifier space of the partition to at least some of the plurality of machine resource identifiers, and wherein the mapping defines a non-monotonic function;

means for translating the physical resource identifier into a machine resource identifier using the mapping, wherein the machine resource identifier specifies the select one of the plurality of machine resources; and

means for causing the select one of the plurality of machine resources to be accessed using the machine resource identifier.

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Claim 19. The apparatus of claim 18, wherein the plurality of machine resources comprises a plurality of machine memory locations, wherein the plurality of machine resource identifiers comprises a plurality of machine memory addresses, and wherein the plurality of physical resource identifiers comprises a plurality of physical memory addresses.

Claim 20. The apparatus of claim 18, wherein the means for accessing comprises means for reading a datum from the machine memory address.

Claim 21. The apparatus of claim 18, wherein the means for accessing comprises a means for writing a datum to the machine memory address.

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Claim 23. In a partitionable computer system including a plurality of machine memory locations having a plurality of machine memory addresses, the partitionable computer system further including a plurality of physical memory locations having a plurality of physical memory addresses that are mapped to at least some of the plurality of machine memory addresses, the mapping defining a non-monotonic function, the partitionable computer system further including a plurality of partitions executing a plurality of software programs, a method comprising steps of:

- (A) selecting a first subset of the plurality of physical memory locations, the first subset of the plurality of memory locations being mapped to a first subset of the plurality of machine memory addresses; and
- (B) remapping the first subset of the plurality of memory locations to a second subset of the plurality of machine memory addresses without rebooting the partitionable computer system.

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Claim 25. In a partitionable computer system including a plurality of machine memory locations having a plurality of machine memory addresses, the partitionable computer system further including a plurality of physical memory locations having a plurality of physical memory addresses that are mapped to at least some of the plurality of machine memory addresses, the mapping defining a non-monotonic function, the partitionable computer system further including a plurality of partitions executing a plurality of software programs, an apparatus comprising:

means for selecting a first subset of the plurality of physical memory locations, the first subset of the plurality of memory locations being mapped to a first subset of the plurality of machine memory addresses; and

means for remapping the first subset of the plurality of memory locations to a second subset of the plurality of machine memory addresses without rebooting the partitionable computer system.

Claim 27. The method of claim 1, wherein the interface comprises a Content Addressable Memory that establishes the mapping.

Claim 28. The method of claim 8, wherein the interface means comprises a Content Addressable Memory that establishes the mapping.

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Claim 29. The method of claim 18, wherein the means for translating comprises a Content Addressable Memory.

Claim 30. The method of claim 23, further comprising a step of:

prior to the step (B), copying the contents of the first subset of the plurality of machine memory addresses to the second subset of the plurality of machine memory addresses.

Claim 31. The apparatus of claim 25, further comprising:

means for copying the contents of the first subset of the plurality of machine memory addresses to the second subset of the plurality of machine memory addresses.

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APPENDIX B: EVIDENCE

No evidence is submitted in support of this Appeal Brief.

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APPENDIX C: RELATED PROCEEDINGS

Applicant's attorney knows of no related pending appeals or interferences.